Glass opens up the view and creates a horizon. It’s inviting. It reflects the quality standards of architects, glass manufacturers, facade planners, metal and facade engineers, and brings transparency to a building. Incorporating glass into a construction is always a challenge but with SEFAR® Architecture VISION glass presents the perfect combination of design and function.
Sihlpost, Zurich, Switzerland.
A multi-story window facade covering a total area of 6,500 m² (65,000 sqft) characterizes the «Haus Lagerstrasse». Designed by Gigon/Guyer architects, the glass facade elements feature SEFAR® Architecture VISION Fabric with open areas between 55 % and 70 %, reducing solar glare and improving the working environment.
Sefar weaves into glass design

In the Swiss town of Heiden, Sefar has been developing outstanding solutions with technical fabrics since 1830. Sefar products have applications in a wide range of industries from electronics, printing, medicine, automobiles, foodstuffs, and pharmaceuticals right up to the aerospace industry, mining, refining, and architecture. The Sefar Group uses its fabric expertise to support architects, planners, and construction companies in achieving optimum results.

**The prospect of new solutions for architects, planners, and fabricators**

Those who value interplay with their surroundings appreciate glass structures. When other buildings seem a little tired, glass continues to shine proudly.

Glass delivers a cool elegance, an inviting openness and transparency. Glass with SEFAR® Architecture VISION delivers an exciting interplay of light and the appearance of purity and clarity. Fabric membranes in glass create infinite scope for design creativity and function.
Fabric in glass emphasizes all its advantages and brings an endless supply of new creative possibilities. Ambitious and adventurous designs using glass become a reality. With SEFAR® Architecture VISION fabric for glass applications, most designs are achievable while functional.
Belaruskaya Kalijnaya Kompaniya (BKK), Minsk, Belarus. Resembling the redsylvinite crystal, the facade specifications for this corporate building designed by architects Varabyeu Partners in Minsk, combine maximum application of color, light, and glass. Imparting both color and light simultaneously, the single-side printed SEFAR® Architecture VISION PR 260/55 red fabric has an open area of 55%, allowing for unaltered views from the interior and no color «read-through» into the atrium.
It is unusual for a building material to bring so much openness to architecture. Glass in itself is an excellent construction material. Glass in combination with fabric propels ambitious architects to the very forefront.

SEFAR® Architecture VISION is a range of high-precision fabrics made from synthetic black fibers. In a complex process, fabric made from thread sizes of 140 or 260 microns is metal-coated on one side. The range consists of Aluminum, PR Copper, and PR Gold. By means of digital printing, the coated fabric sides can be further individualized with simple lettering or even designs covering a large area. Fabrics coated on both sides can have two completely different printed designs without any read-through on the reverse side. In this way, glass gains color – and a designer signature on the exterior and preserves views and reduces glare in the interior. And there are a multitude of extremely attractive design possibilities for glass and the skillful interplay with light. When used in facade elements, SEFAR® Architecture VISION Fabric is laminated in glass. With two fabric layers, moiré patterns or hand-crumpled fabrics enable the creation of a truly unique design.

Single-side printed SEFAR® Architecture VISION Fabric emphasizes the sculptural appearance externally in a clever way. The external view from inside remains almost clear and unaltered because of the special one-way visual effect of the fabric.
Free space for architectural form language
SEFAR® Architecture VISION Fabric creates interplay with light and environment.

Architects and clients demand new design possibilities. They desire to integrate existing surroundings and the landscape. The solution is a combination of glass with fabric. Glass conveys both modernity and lightness of touch. Glass with integrated SEFAR® Architecture VISION Fabric alternates between transparency and reflection, and mirrors the beauty of its location and environment.

Minute by minute, the Sefar fabric glass skin alters its appearance, reflecting sky or water and changing over the course of the day and the seasons. But glass in combination with Sefar fabric can do even more. It gives the environment a completely new dynamic and changes the face of its surroundings, creating its own identity.

Würth, Rorschach, Switzerland. Around 1750 laminated glass panels form the extensive, graceful, and rhythmic shell (approx. 7,800 m²) of this company building designed by architects Gigon/Guyer. The single-sided, aluminum-coated SEFAR® Architecture Vision Fabric AL 140/70 combines optical and energy-saving functions perfectly.
Metal-coated fabrics lend facades a special aesthetic quality.

Various fabric types and different metal coatings provide scope for creative planning - on facades and parapets, with blinds, partitions, and wall coverings. One thing is certain: The unique interaction with natural and artificial light. This imparts an atmosphere to interior spaces. And exterior surfaces seem to absorb their surroundings. With the addition of different types of glass and fabric, the possibilities for remarkable, aesthetic design possibilities are greater still.

Virtually every design and pattern is possible, even with CI-compliant houses and special colors. Combinations with structured glass or float and mirror glass with SEFAR® Architecture VISION Fabrics are surprisingly effective. Metalized and used in conjunction with glass, technical precision fabrics can be laminated between single panes to alert free-flying birds and provide the building with climatic, acoustic, and optical functions in equal measure. The result is a slender, rhythmic glass curtain which offers protection from glare, noise, heat radiation, and over-cooling.

Fashion Group Headquarters, Madrid, Spain.
The alternation between clear glass and glass finished with SEFAR® Architecture VISION Fabric lends a third dimension to the facade. The high reflective properties prescribed by Rafael de La-Hoz Architects are achieved by additional calendering of the fabric.
Metal-coated fabric
Aluminum coated fabric can be printed in an additional process, e.g., with a logo or any two-dimensional design. In this way, metal can be given an individual and more emotional component.

Curved glass
Curved glass is a clever variation, e.g., in stores or trade fair buildings, or for bathing and spa areas.
Glass and fabric: Multifunctional interaction

This unique combination gives a building personality and a new radiance.
Facade designers, planners, and architects determine the individual external appearance of a building through the skillful combination of glass, window sashes, and pillars, as well as operable glass fins and/or facade elements. Glass with integrated SEFAR® Architecture VISION Fabric provides an increased range of safety and functional characteristics, thereby increasing the advantages of glass in application. The special finish using SentryGlas® Foil for facade windows meets the very highest safety standards. The percentage of open areas in a chosen fabric depends on how much visual transparency is desirable from the outside and to what extent the glass needs to provide protection from glare and thermal reduction. The reflective properties offered by the metal coating reduces heat input considerably and makes a correspondingly valuable contribution to the environment and to associated energy costs. Additionally, independent studies have also shown that the risk of bird strikes on glass facades with integrated SEFAR® Architecture VISION Fabric is significantly reduced.

Thanks to the one-way vision effect, external views from inside the building and natural light quality are virtually unrestricted.
Safe, comfortable, and resource-friendly

Glare and sun protection
SEFAR® Architecture VISION softens focus – simultaneously reflecting sunlight, reducing glare, and lowering heat absorption, thereby saving energy and protecting the environment.

One-way vision effect – privacy and external views
The one-way vision effect means the assurance of internal privacy yet, depending on the type of fabric chosen, a virtually unrestricted view of the outside world, while reducing glare and possible the need for an interior shading system.
Energetics

The higher reflectance of the metal coating reduces heat transfer inwards during the summer, reducing demand on the air-conditioning system, thereby helping to save energy and reducing a building’s energy cost.

Safety

In conjunction with a SentryGlas® ionoplast interlayer, functional windows meet not only exacting architectonic requirements but also the very highest safety standards.

Bird protection

A study by the Swiss Ornithological Institute near Lucerne has shown that bird strikes on glass facades with integrated SEFAR® Architecture VISION Fabric can be greatly reduced.

With Sefar fabric, glass gains additional value and it looks great.
Sihlpost, Zurich, Switzerland. Conceived by David Chipperfield, the warm, golden tones of SEFAR® Architecture VISION Fabric dominate the facade in this railway facilities area.
Sihlpost, Zurich, Switzerland. For the glass façade on this building section on Europaallee, architects Gigon/Guyer selected SEFAR® Architecture VISION Fabrics with open areas ranging from 31% – 70%.
The range: Anything but a standard range

The standard range includes fabrics with different thread sizes. The open area or apertures – is formed depending on the fabric weave type. The percentage of the open area determines the one-way vision effect, controlling the degree of vision protection from the outside inwards and influences the almost neutral external view from within the building.

In this way, planners decide how much light, privacy, and unobstructed views they want to have according to their choice of fabric and weave. With a choice of AL, PR Gold, and PR Copper, exciting new design possibilities are created – both for interiors and exteriors.

Detailed information about the fabrics shown here and the entire range can be found on our homepage.
Glass and Color: You have a free hand.

**Special colors**

Colors are as individual as construction projects, businesses, and people. Hardly any construction component conveys as much emotion as color.

For this reason, it is crucial to Sefar that every custom color is faithfully reproduced in its final application.

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**Product labeling**

4 fabrics and 1 metal coating (single and/or double-sided available) together with 2 print colors form the 16 products in the comprehensive basic range. Product labeling provides information on the coating metal, thread thickness in microns (µm), and the percentage of open area in a fabric. If a fabric has also been printed, the product label begins with «PR».

<table>
<thead>
<tr>
<th>PR AL 260/25</th>
<th>Open area (%)</th>
<th>Thread diameter (µm)</th>
<th>Metal coating (AL = Aluminium)</th>
<th>Printed</th>
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**Designs**

From color patterns to branding, the fabric can be custom printed and individualized, with no read-through to the other side of the glass. If the fabric is coated on both sides, it can have different printed designs on each side without any read-through to the other side.
Glass alone would be insufficient


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**Energy transmission in laminated glass in combination with Vision Fabric**

Glass on its own allows almost unrestricted sun and light into a building. The total energy transmission (g-value) according to DIN EN 410 gives a critical indication of the proportion of incident solar radiation entering an interior space. The lower the g-value, the better the protection from summer heat. SEFAR® Architecture VISION Fabric plays a crucial role in reducing solar gain into a building.

The fabric's open area determines the degree of energy transmission and transparency. With the denser meshes in particular, a significant reduction in light and heat transmission can be achieved. When weaving synthetic filaments, warp threads are respectively raised or lowered and the weft threads in-between shot or drawn. In this way, it is possible to create meshes with an open area from 25% – 55%. The metal coating is also instrumental in the reduction of energy transmission.
SEFAR® Architecture VISION Fabrics empowers glass with optically and functional properties.

Processing the fabric places stringent demands on production quality and consistency. For this reason, Sefar works exclusively with selected certified lamination partners who can guarantee the highest quality standards. These companies have tested the fabric applications extensively. The presence of SEFAR® Architecture VISION is identified by a special logo.
Glass in construction is a revelation

Two Lines.
London Design Festival, Great Britain.
The installation by David Chipperfield Architects featured SEFAR® Architecture VISION Fabric, introducing shapes and material effects in a new way.